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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,423	01/10/2002	Patrick M. White	1.P566.25	9863
7590 12/08/2004		EXAMINER		
John MOETTELI			BINDA, GREGORY JOHN	
BUGNION S.A.			ART UNIT	PAPER NUMBER
Case postale 375			7401 0.171	THE EXTENSION
GENEVA, 1	211 GENEVA 12	3679		
SWITZERLAND			DATE MAILED: 12/08/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
(	10/043,423	WHITE, PATRICK M.
Office Action Summary	Examiner	Art Unit
	Greg Binda	3679
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICAT!  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days  If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a ron. a reply within the statutory minimum of third beriod will apply and will expire SIX (6) MON statute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).
Status		
<ol> <li>Responsive to communication(s) filed on</li> <li>This action is FINAL. 2b)</li> <li>Since this application is in condition for al closed in accordance with the practice un</li> </ol>	This action is non-final.  Iowance except for formal matt	
·		·
A) □ Claim(s) 1-62 is/are pending in the application of Claims  4) □ Claim(s) 1-62 is/are pending in the application Papers  9) □ The specification is objected to by the Example Applicant may not request that any objected to by the Claim (s) are objected to the Claim (s) are subject to restriction of Claim (s) are subject to papers  9) □ The specification is objected to by the Example Claim (s) filed on OB November 2000 Applicant may not request that any objection the Replacement drawing sheet(s) including the Claim (s) The oath or declaration is objected to by the Claim (s)	is/are withdrawn from consider and/or election requirement.  aminer.  4 is/are: a) accepted or b)  to the drawing(s) be held in abeyar correction is required if the drawing	objected to by the Examiner. nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in A e priority documents have been sureau (PCT Rule 17.2(a)).	opplication No received in this National Stage
Attachment/s)		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-94)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/8)  Paper No(s)/Mail Date	18) Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Election/Restrictions

2. Claims 1-17 & 28-62 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on May 10, 2004.

## Claim Rejections - 35 USC § 112

- 3. Claims 18-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. The term "super" in claim 18, lines 3 & 7 and claim 19, line 2 is a relative term which renders the claim indefinite. The term "super" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not possible to determine the difference between "elastic" and "super elastic".
  - b. Claim 18, line 7 recites the limitation, "a super elastic activation in the shaft". What is "a super elastic activation" and how does it manifest itself in a shaft?

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## Claim Rejections - 35 USC § 102

- 4. Claims 18-23 & 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Bartholomew, US 3,610,056. Figs. 1 & 2 show a torque-transmitting coupling assembly comprising: a split collet member 34 having an exterior surface 68 and an opening 54; an elongated shaft member 24 made of an elastic alloy received within the opening 54; a sleeve member 38 having a bore 36 that receives the exterior surface 68 of the collet 34 and a cutting tool-bit or powered instrument 20 connected to the collet. Figs. 1 & 2 show the collet 34 and shaft 24 are in surface-to-surface contact in a fixed relative position. Figs. 1 & 2 show the shaft 24 and the collet 34 each have a cannulation that are aligned with each other so as to provide a common passage of a guide wire 32 therethrough. Fig. 1 shows an inter-positional polymer sleeve 40 which can transmit bending stress in the assembly.
- 5. Claims 18-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Belef et al, US 6,078,831. Figs. 12 & 13 show a torque-transmitting coupling assembly comprising: a split collet member 116 having an exterior surface and an opening; an elongated shaft member 44 made of nitinol (see col. 6, line 3) received within the opening, a sleeve member 26 having a bore that receives the exterior surface of the collet 116; and a cutting tool-bit or powered instrument 20 connected to the collet. Figs. 12 & 13 show the collet 116 and shaft 44 are in surface-to-surface contact in a fixed relative position.

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## Claim Rejections - 35 USC § 103

Claims 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krivec et al. 6. US 5746,298 (Krivec) in view of Sohn et al, US 5,988,171 (Sohn). Figs. 1-4 show a torquetransmitting coupling assembly comprising: a split collet member 40 having an exterior surface and an opening; an elongated shaft member 30, 65 received within the opening; a sleeve member 45 having a bore that receives the exterior surface of the collet 40; and a cutting tool-bit or powered instrument (see col. 4, line 35) connected to the collet. Figs. 3 & 4 show the collet 40 and shaft 30 are in surface-to-surface contact in a fixed relative position. In col. 5, line 21 through col. 6, line 49, Krivec discloses that the contact area between collet and shaft is calibrated to slip at a preset torque before failure strength of the shaft is reached. Krivec discloses in col. 1, lines 61-64 and col. 6, lines 57-60 that the torque-transmitting coupling assembly is used in a prosthodontic screwdriver, but does not disclose the shaft being made of an elastic alloy. In col. 12, lines 10-28 and in Figs. 4 & 5, Sohn discloses that a shaft for use in prosthodontic screwdriver should be made of an elastic alloy. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the torque-transmitting coupling assembly of Krivec by making the shaft from an elastic alloy in order to provide a suitable shaft for a prosthodontic screwdriver as taught by Sohn.

# Response to Arguments

7. Applicant's arguments filed November 8, 2004 have been fully considered but they are not persuasive.

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a. With regard to item 3a above, applicant argues that the word "super" is not ambiguous when used in the term "super-elastic" because applicant can find at least 3200 different uses of the term in written communications. However, applicant does not state how many of these uses is in a relevant communication (i.e. one that has to do with torque-transmitting couplings). As such the rejection is valid until applicant either (1) shows where the instant application provides a definite (i.e. unambiguous) meaning for the term "super-elastic" or (2) shows that there is a definitive meaning (i.e. not 3200 different meanings) for this term, a meaning that one would reasonably expect to be known to practioners in the art of torque transmitting couplings.

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- b. With regard to item 3b, applicant argues that the limitation "super-elastic activation of the shaft" is clearly defined in the specification, particularly in light of the amendment. However, applicant fails (in both the specification and his arguments) to actually provide a definitive explanation or definition of the limitation.
- c. Applicant argues that Bartholomew fails to show or suggest the shaft member 24 as being made from a super elastic alloy. However, in col. 3, lines 2, 9 & 10+,

  Bartholomew discloses that the shaft member is flexible drive cable of any well known construction. As such it appears the drive shaft 24 is made from a super elastic alloy, at least as is understood in the context of the instant application where the meaning of the term "super elastic" is ambiguous at best. Furthermore, it is not unreasonable to say Bartholomew's flexible shaft 24 reads on the limitation "super-elastic" if the limitation reads on everything covered by the 3200 usages to which applicant has already stipulated.

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d. Applicant argues that Belef fails to show or suggest the shaft member 44 as being made from a super elastic alloy because only a portion of the shaft 44 is expressly disclosed as being made from nitinol. However, so long as the shaft 44 comprises some amount of nitinol, it reads on the limitation, "a shaft member made of a super-elastic alloy". Nothing in the limitation (or anywhere else in the original disclosure) is the shaft of the instant invention required to be made exclusively from a super-elastic alloy

- e. Applicant argues that Krivec fails to show or suggest the claimed invention because Krivec's collet 40 "is nothing more than a sleeve with cantilevered fingers".

  However, there are no limitations in the instant claims which would preclude "a sleeve with cantilevered fingers" from reading on the split collet member recited therein.
- f. Applicant argues that the Krivec is non-analogous art because it discloses a slip feature. However, the argument is unpersuasive, because the claimed invention (see particularly claim 24) is directed to a device that comprises a slip feature.
- g. Applicant argues that Sohn fails to show or suggest a shaft member being made from a super elastic alloy. This argument is unpersuasive for the same reason noted in subparagraph 'c' above.

#### Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Greg Binda Primary Examiner

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